

THE ETHIOPIAN FLORA PROJECT: PAST, PRESENT AND FUTURE – AN EDITOR'S VIEW

Inga Hedberg¹

ABSTRACT: A brief account of some of the problems experienced during the 29 years of editing is given, as well as comments on how the Flora of Ethiopia and Eritrea is being used at present. The urgent need to produce regional and local Floras is stressed and the instrumental role of the Flora in this connection is emphasized. The distribution of the Flora volumes is touched upon as well as the need for an electronic version.

INTRODUCTION

When I was invited to this conference it was suggested that I should talk about the Flora Project as seen from the Swedish perspective, as well as my experiences as one of the editors of the Flora. But the history of the birth of the Project, launched in 1980, and its subsequent development and editing has been told many times over the years (I. Hedberg, 1986; 1990; 1996, 2001; O. Hedberg, 1983; O. Hedberg *et al.*, 1979, Tewolde Berhan Gebre Egziabher, 1991), so I am not going to repeat it here. However, even if I would like to change the focus a bit, there are quite a few things in my work as editor that I have never talked about, so I can't refrain from giving a few glimpses from that time. After all, the project kept me busy for more than 40 years - first off and on for 13 years of fund hunting - and then for 29 years of editing the eight volumes (Hedberg and Edwards, 1989; 1995; Hedberg *et al.*, 2003; 2004; 2006; 2009a; 2009b; Edwards *et al.*, 1995; 1997; 2000), including the writing up, together with Olov (my late husband), of the impossible Apiaceae along with a few other families. But seeing the Flora completed, I also find it fitting to touch upon the present, and to dwell upon Olov's and my visions for the future.

The Past

When I shouldered the responsibility of co-editing the Flora of Ethiopia I had been an editor for about 15 years and thought I knew all about the job. But I soon found out that editing journals or books is something quite different from editing a Flora - and not only timewise!

¹ Department of Systematic Biology, Evolutionary Biology Centre, Uppsala University, Norbyvägen 18 D, SE-752 36 Uppsala, Sweden. E-mail: inga.hedberg@ebc.uu.se

Since we started to secure contributors long before funding was granted, we made a flying start once money became available for the project. The decision, though well founded, to publish not family by family but in volumes covering up to 59 families, often caused considerable and unforeseen delays, since for some of us time doesn't count. This meant that some manuscripts had to wait for about ten years before all contributions for the relevant volume had arrived and were ready for printing, which of course was not taken well by the author, who had delivered his or her manuscript at an early stage. This was one of the most difficult situations since I could do precious little about it. But I was consoled by more experienced Flora editors, who assured me that ten years or more was not unusual. In fact, delays in publishing the Flora volumes became the rule rather than the exception, which, I have noticed, is the fate of most Floras. And, after all, we successfully completed the Flora in a comparatively short time.

Since funding was limited, the need for illustrations caused another problem. The first option was to use illustrations from already published Floras or other books or journals, which sometimes meant hunting for weeks just to find the right illustration. Here we had excellent help from the Biology Library at my university, where the staff obviously made a point of finding even the most inaccessible books, or journals never heard of. I don't think they failed even once to find what we were looking for. Luckily, permission to reproduce was in most cases quite easy to obtain, some authors even expressed their satisfaction at seeing their illustrations being used anew. Sometimes, however, the demand on the wording to be used in the acknowledgements in the legends was so detailed that we just had to start all over again to find another illustration. Of course, we also engaged artists, but this was an agreement between the author and the artist – we only paid for the work.

Taking into consideration that in all about 90 botanists have been involved in the Flora work, it is amazing that the collaboration has been so relatively easy. Looking back I find it extremely satisfactory that during those 29 years, serious disagreements were few and far between and did not cause any upheavals or considerable delays. Of course, I sometimes had to deal with rather intricate problems, but I can't recall any contributor with whom I am not on friendly terms today.

One of the most serious problems turned up very late in the process, when Professor Pichi-Sermolli in Florence passed away in 2005. Since he was the

great expert on Ethiopian ferns, we had already approached him at the planning stage of the Flora and he had accepted, on condition that he would be the sole author. This was around 1970 and as the ferns would be the last volume to be printed, we agreed. However, as time passed by and for reasons, unknown to me, we did not get any material from Professor Pichi-Sermolli. He was a very charming person but at the same time very temperamental, so it took all my diplomatic ability in trying to persuade him to deliver his material, unfortunately without any result whatsoever. I have a feeling that his intention might have been not to send anything until all his families were written up. Anyhow, when he died we had virtually nothing on the ferns, and the suggestion that we could publish his material posthumously did not appeal to his wife. A colleague at Kew then suggested to me that we should just leave out the ferns – “after all they are so different from the seed plants”. This would have been an option, had the fern volume been the last one in number. But, because of their systematic position, they had been planned for Volume 1, and I felt that any Flora or series just couldn’t begin with Vol. 2. The rather precarious situation was solved, however, thanks to Koos Roux in Cape Town, who took the lion’s share, Ib Friis, Sebsebe Demissew and Ensermu Kelbessa, and before long the Flora volume appeared.

With regards to funding, my impression when I started to write this paper was that, throughout all those years, we had remarkably few problems. However, browsing through the impressive number of reports, evaluations, other kind of documents, and exchange of e-mails, a different picture emerged. I found a number of more or less critical documents, but they almost always revealed either lack of understanding of what Flora work means, or were ill-founded. But I also found documents in which SAREC (the funding agency) sent a sharp warning. For instance, in November 1999, my SAREC contact wrote “I suggest funding for two more years according to your budget. The Flora must be completed now and SAREC will not consider any more funding when those two years have passed.” This was not the only time SAREC set a time limit, but I must have been rather clever in convincing them about the wise use of their money, since without too much trouble they funded us all the way until the Flora was completed in 2009. And I can recall only one occasion when it seemed that we were definitely denied further funding – and that was, interesting enough, for the last half year or so. But even then I managed to secure funding also for those months.

As to my own working conditions they were rather remarkable. Since planning at the higher levels didn't always work as we would have liked, I had to work for shorter or longer periods without a contract, and consequently without payment. This also happened to my colleagues Kaj Vollesen and Mike Gilbert, then working for the Project at Kew. Usually it was a question of weeks or perhaps a couple of months but once in the 1990's I had to wait for the contract for about nine months! Some of my colleagues then suggested that I should temporarily stop work, which of course I couldn't since that would delay the Flora even more.

The Present

Now, that the project is successfully completed, it is of considerable interest to me, and I believe to many of my colleagues and others, to see the outcome.

It is assumed that the eight volumes will cover, as far as possible, the entire flora of Ethiopia and Eritrea. But inevitably new findings will turn up as already indicated in the Flora, in which species, and even families, occurring on the other side of the border to adjacent countries, are touched upon or even described in the relevant volume. With the basic work done it should be easier to explore and describe the flora in lesser known areas, and already Ib Friis and others are adding new findings from various areas (Friis *et al.*, 2011).

A second aspect is the use of other kinds of information, gathered over the 29 years and accounted for in Vol. 8, for instance "Natural vegetation of the Flora area" and "Useful plants of the Flora of Ethiopia and Eritrea area as extracted from vols. 2 to 7". Much of the information on the use of plants is taken from herbarium labels, from which it is not clear whether the information is really linked to the specimen in question, or if it is some kind of general knowledge about the species, taken from literature or other sources. But even so, this part of the Flora forms a valuable tool in the research on useful plants already going on at Addis Ababa University.

Also, plants in the Flora area, not recorded to be used but reported in other Floras to be useful, would be of considerable interest for research, such as *Trema orientalis*, a very fast-growing tree or shrub that might have potential as a firewood crop.

The project has also served as inspiration for other departments and bodies to launch different projects in various fields (Ensermu Kelbessa, 2011; Sebsebe Demissew *et al.*, 2011).

An entirely different matter, also of current interest, is the distribution of the Flora volumes to all those, more or less round the world, who have been looking forward to getting hold of the complete work. Unfortunately some of the standing orders have been withdrawn, but there are still many left. For various reasons it was decided at an early stage that the distribution should be handled by Swedish Science Press in Uppsala, but this worked for the first published volumes only. Attempts have been made for years to solve the distribution problem but so far without success. We were very near a solution last summer (2010) but for reasons, unknown to me, it failed. Letters emphasizing the good scientific quality of the Flora and stressing the importance of a proper distribution make it very important to solve the problems as soon as possible.

The Future

Even if my duties as external project leader and co-editor of all the Flora volumes are over, and Olov is no longer with us, our engagement in the Flora Project allows me, I think, to air, in short, our views about the future.

When on March 11th, 2009, I sent, by diplomatic pouch, the camera-ready material for vols. 1 and 8, the last two to be printed, I felt quite relieved – to say the least. Funding came to an end about three months later (June 30th), and the Project was thus completed. But not soon after it occurred to me that, after all, this couldn't be the end. The three goals originally set for the Project were fulfilled but even at an early stage it was evident to many of us that the elaboration of a scientific Flora would be only a first step. To make use in various ways of all the information accommodated in the volumes, regional and local Floras would be one of the next steps to head for.

For teaching purposes on different levels, and for administrative units, the vast differences within the Flora area, in various aspects, make it necessary - or at least highly desirable - to produce smaller, more handy books, adapted to the different areas. I felt this very strongly at the AETFAT congress in 2003 here in Addis when a young teacher from the countryside came up to Olov and me, expressing his appreciation of our commitment to Ethiopia and its flora and stressing the importance of teaching material adapted to local conditions. I then felt that if teachers like him in different parts of the country could be provided with a useful Flora or handbook for the relevant region, much would be gained in making people realize the value of their plants and the biodiversity.

Finally, quite a few years ago, at one of the many lectures I have given at home on the Flora Project, I was asked if we hadn't considered electronic publication. By then I think we had touched upon the matter at Editorial Board meetings. I have also, for some years, included a few words in my yearly reports to SAREC that electronic publication would be desirable once the Flora was completed.

Now the time has come, and though I fully realize that this is a matter to be dealt with by my Ethiopian colleagues, not by me, I nevertheless venture to bring it up. I have taken the liberty to discuss with knowledgeable people back home, since we have disks for most of the volumes available. But since vernacular names, etc. have been added in all volumes at the National Herbarium, and the illustrations in the first volumes printed (Vols. 3 and 7) were glued to the pages and thus don't exist as files, those disks are not complete. Furthermore, the programme used seems to be rather out of date. Thus the best way, according to my informants, would be to start by scanning all volumes. This and databasing of course requires money and manpower, both of which will probably be difficult to find, but an electronic version nevertheless is something to strive for.

Those, in short, are Olov's and my thoughts about the continuation of the Ethiopian Flora Project. Are they a dream? - a vision? - or a real possibility?

REFERENCES

- Edwards, S., Mesfin Tadesse and Hedberg, I. (eds.) (1995). **Flora of Ethiopia and Eritrea. Vol. 2:2. Canellaceae to Euphorbiaceae.** Addis Ababa and Uppsala.
- Edwards, S., Sebsebe Demissew and Hedberg, I. (eds.) (1997). **Flora of Ethiopia and Eritrea. Vol. 6. Hydrocharitaceae to Arecaceae.** Addis Ababa and Uppsala.
- Edwards, S., Mesfin Tadesse, Sebsebe Demissew and Hedberg, I. (eds.) (2000). **Flora of Ethiopia and Eritrea. Vol. 2:1. Magnoliaceae to Flacourtiaceae.** Addis Ababa and Uppsala.
- Ensermu Kelbessa (2011). The role of the Ethiopian Flora Project in the establishment of the first botanical garden in Ethiopia. *Acta Univ. Ups. Symb. Bot. Ups.* **35**(2):181–188.
- Friis, I., Phillips, S., Gilbert, M.G., Challen, G., Shire, B., Sebsebe Demissew and Bidgood, S. (2011). New additions to the Flora of Ethiopia and Eritrea in the families Euphorbiaceae, Fabaceae (Leguminosae), Lamiaceae, Campanulaceae, Eriocaulaceae and Poaceae. *Acta Univ. Ups. Symb. Bot. Ups.* **35**(2): 107–128.
- Hedberg, I. (1986). The Flora of Ethiopia: A progress report. In: **Research on the Ethiopian Flora**, (Hedberg, I., ed.). *Symb. Bot. Ups.* **26**(2): 17–18.
- Hedberg, I. (1990). The Ethiopian Flora Project. In: **Proceedings of the Twelfth Plenary Meeting of AETFAT**, Mitt. Inst. Allg. Bot. Hamburg 236, pp. 745–746 (Ihlenfeldt, H-D., Baijnath, H., Cheek, M., Hepper, F.N., Lejoly, J., Lucas, G.L., Malaisse, F.P., Peters, C.R. and Wessels, D.C.J., eds.).

- Hedberg, I. (1996). Flora of Ethiopia and Eritrea. In: **The Biodiversity of African Plants**, pp. 802–804 (van der Maesen, L.J.G., van der Burgt, X.M. and Medenbach de Rooy, J.M., eds.). Proceedings of XIV AETFAT Congress, 22-27 August 1994, Wageningen, The Netherlands. Kluwer, Dordrecht.
- Hedberg, I. (2001). Thirty years with the Ethiopian Flora project. *Biol. Skr.* **54**:13–17.
- Hedberg, I. and Edwards, S. (eds.) (1989). **Flora of Ethiopia. Vol. 3. Pittosporaceae to Araliaceae**. Addis Ababa and Uppsala.
- Hedberg, I. and Edwards, S. (eds.) (1995). **Flora of Ethiopia and Eritrea. Vol. 7. Poaceae**. Addis Ababa and Uppsala.
- Hedberg, I., Edwards, S. and Sileshi Nemomissa (eds.) (2003). **Flora of Ethiopia and Eritrea. Vol. 4:1. Apiaceae to Dipsacaceae**. Addis Ababa and Uppsala.
- Hedberg, I., Friis, I. and Edwards, S. (eds.) (2004). **Flora of Ethiopia and Eritrea. Vol. 4:2. Asteraceae (Compositae)**. Addis Ababa and Uppsala.
- Hedberg, I., Ensermu Kelbessa, Edwards, S., Sebsebe Demissew and Persson, E. (eds.) (2006). **Flora of Ethiopia and Eritrea. Vol. 5. Gentianaceae to Cyclocheilaceae**. Addis Ababa and Uppsala.
- Hedberg, I., Friis, I. and Persson, E. (eds.) (2009a). **Flora of Ethiopia and Eritrea. Vol. 1. Lycopodiaceae to Pinaceae**. Appendix. Addis Ababa and Uppsala.
- Hedberg, I., Friis, I. and Persson, E. (eds.) (2009b). **Flora of Ethiopia and Eritrea. Vol. 8. General part and Index to vols. 1-7**. Addis Ababa and Uppsala.
- Hedberg, O., Friis, I. and Wickens, G. (1979). Report from a meeting of AETFAT members interested in the Flora of Ethiopia. In: **Taxonomic Aspects of African Economic Botany**, 248 pp. (Kunkel, G., ed.). Las Palmas.
- Hedberg, O. (1983). Ethiopian Flora Project. *Bothalia* **14**:571–574.
- Sebsebe Demissew, Ensermu Kelbessa, Friis, I., Nordal, I., Sileshi Nemomissa, Tamirat Bekele, Tadesse Woldemariam, Zemede Asfaw and Zerihun Woldu (2011). The Flora Project: A springboard to other projects. *Acta Univ. Ups. Symb. Bot. Ups.* **35**(2):189–215.
- Tewolde Berhan Gebre Egziabher (1991). The Ethiopian Flora Project. In: SAREC Documentation Project Report 1: 1–18.